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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,389	12/23/2003	Masahiko Matsukawa	21581-00310-US	7940
30678 7590 09/05/2008 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20006				
EXAMINER				
KRUEER, KEVIN R				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
09/05/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/743,389

Applicant(s)

MATSUKAWA ET AL.

Examiner

KEVIN R. KRUEER

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1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 8, 9, 13, 15 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 8, 9, 13, 15 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Apparatus Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/20/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 25, 2008 has been entered.

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Das (US 3,964,936) in view of (a) WO01/48264 (herein referred to as Sako) and (b) Tominaga et al (US 4,287,041) or Hayashi et al (US 5,089,101) .

Das teaches a chromium free conversion coating for an aluminum substrate (abstract). The pretreatment is applied solution is applied in amounts of 10-35mg/ft² (col 8, lines 14+). The pretreatment composition comprises the following components:

- Zirconium (abstract) in amounts of at least about 50ppm (col 6, lines 5+);
- fluorine (abstract)
- further said composition may comprise an acid in amounts sufficient to adjust the pH of the treating solution to about 3-5 (col 7, lines 15+);

Das does not teach an organic resin comprising an epoxy compound containing an isocyanate group may be added to the composition. However, Sako teaches a chromium-free rinse composition wherein the organic resin of said composition comprises cation modified epoxy resin AdekaresinTM (col 15, d3), one of applicant's preferred epoxy resins containing an amino group (see page 8 of the specification). Sako further teaches said resin may be crosslinked with an isocyanate group (col 12, lines 14+). Said resin improves the corrosion resistance, fingerprint resistance and workability of the composition (col 5, lines 47+). Thus, it would have been obvious to one of ordinary skill in the art to utilize sufficient amounts of the isocyanate cured Adekaresin taught in Sako to the conversion coating composition taught in Das. The motivation for doing so would have been to improve the composition's corrosion resistance, fingerprint resistance and workability of the composition.

Sako teaches the claimed cation modified epoxy resin but does not teach that the isocyanate crosslinking agent may be partially blocked and reacted with the epoxy resin prior to curing. However, Tominaga teaches corrosion resistant film for metallic

substrates comprising an adduct of an epoxy resin with an amine which may be reacted with a partially blocked polyisocyanate curing agent (col 6, lines 58+). Similarly, Hayashi teaches a corrosion resistant coating for metallic substrate wherein adduct of epoxy and amine (col 10, lines 27+) may be reacted with a partly blocked isocyanate curing agent (col 11, lines 60+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to partially block the polyisocyanate curing agent of Sako and react it with the amino group containing epoxy compound because such methods are commonly used in the art.

4. Claims 13, 15, and 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Das (US 3,964,936) in view of (a) WO01/48264 (herein referred to as Sako) and (b) Tominaga et al (US 4,287,041) or Hayashi et al (US 5,089,101), as applied to claims 1, 8, and 9 above, and further in view of Dolan (US 5,449,415).

Das in view of Sako is relied upon as above, but does not teach the claimed amount of hydrogen peroxide may be added to the composition. However, Dolan teaches a chromium free conversion coating composition optionally comprising hydrogen peroxide in the claimed amounts as an oxidizing agent. Thus, it would have been obvious to add hydrogen peroxide in the claimed amounts to the chromium free conversion coating composition taught by Das in view of Sako. The motivation for doing so would have been that Dolan teaches such amounts of hydrogen peroxide may be added to conversion coatings as oxidizing agents.

With regard to claim 14, Das teaches the composition will comprise zirconium ions.

With regards to claim 18, Das does not teach the composition may comprise silica. However, Dolan teaches silica may be added to conversion coating compositions as a forming agent (col 8, lines 38+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add silica to the composition taught in Das because Dolan teaches silica may be added to a conversion coating composition as a forming agent.

Response to Arguments

Applicant's arguments filed 6/25/08 have been fully considered but are not persuasive.

Applicant argues that the conversion coating of the prior art is used on aluminum, not for use in the substance to be treated with comprises iron. Said argument is noted but is not persuasive because said limitation is an intended use limitation that does not further limit the claimed conversion coating.

Applicant's arguments filed Applicant argues that Sako's coating requires that the epoxy resin must be combined with other required specific components and thus does not teach the claimed invention which "consists of" the recited components. Applicant makes a similar argument with respect to the phosphorus-containing inorganic oxyanions or phosphonate anions taught in Dolan. Said arguments are noted but are not persuasive because neither Dolan nor Sako are the primary reference in the rejection. Furthermore, Applicant has failed to point out why the relied upon teachings of Dolan and Sako could not have been utilized independent of the additional components

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disclosed in said references. Thus, the examiner maintains the position that it would have been obvious to the skilled artisan to rely upon the cited sections of Dolan and Sako in the manner suggested in the rejections of record. Specifically, Sako teaches it is desirable to add the epoxy resin to improve corrosion resistance, fingerprint resistance and workability and Dolan teaches adding hydrogen peroxide as an oxidizing agent to conversion coatings and silica as a forming agent.

Applicant argues the cited art lacks the necessary degree of predictability of success of achieving the properties attainable by the present invention. Said argument is not persuasive because applicant fails to provide any explanation as to why the claimed art is unpredictable. The examiner notes the cited references are in the same field of endeavor and provide clear motivations to make each of the necessary modifications.

Applicant further cites case law regarding properties of the claimed subject matter but does not explain why said citations are relevant to the present application. Since the arguments do not seem to be relevant to the present application, said arguments are moot.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUEER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kevin R Kruer/
Primary Examiner, Art Unit 1794